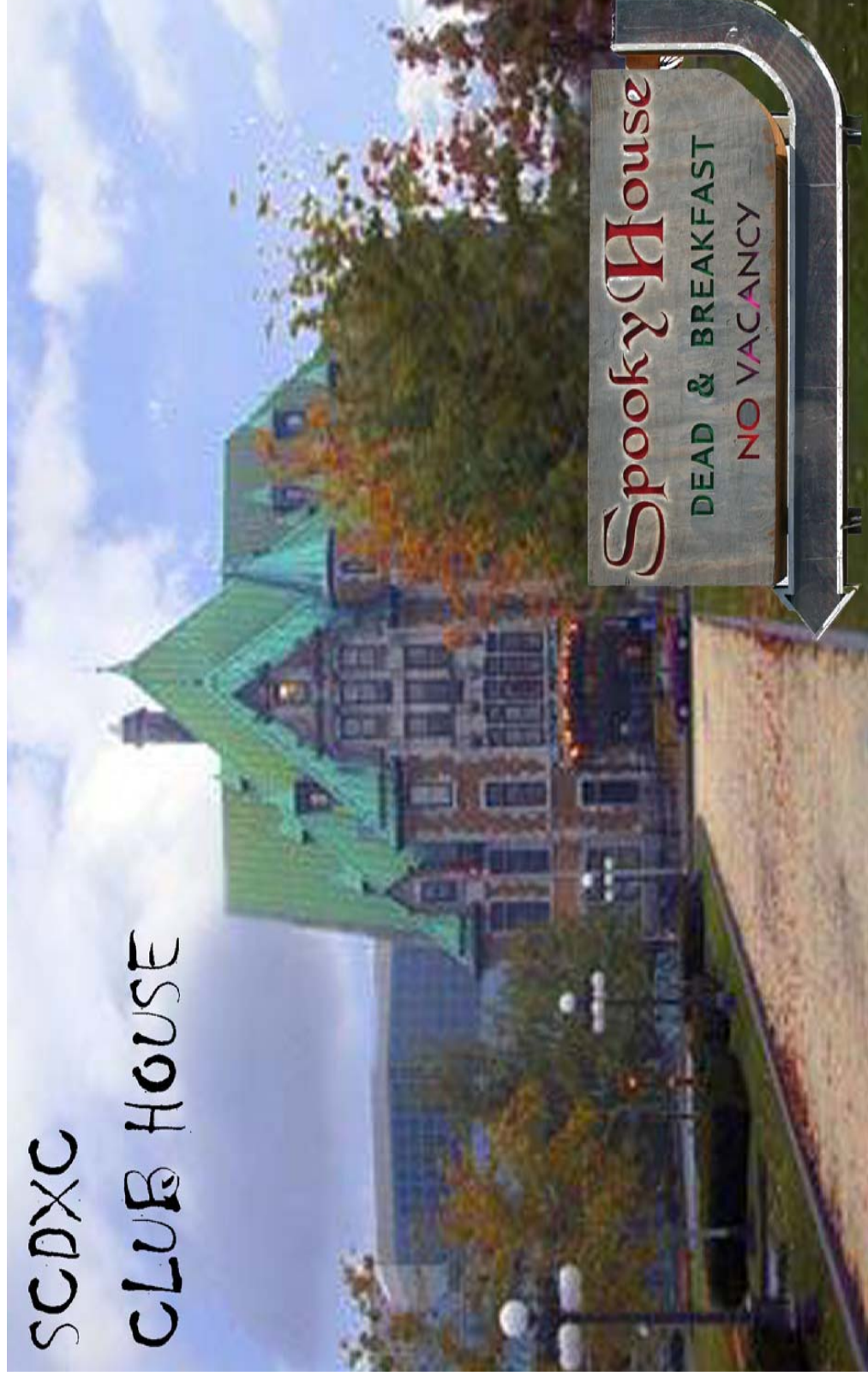




southern california dx club

October 2004

SCDXC
CLUB HOUSE



Soap Box— Words from our President



Vacation / Workshop in Newington CT

Carl and I went to ARRL HQ for a Section Manager Workshop on 17-19 of September, but we also made a great vacation out of this meeting trip. I am sure that you all heard about the 3 1/2hr delay that took place on Sept 15 at LAX, well we were part of that delay. Our flight was to leave at



1 am on the 15th and arrive in CT at 1:15pm, we didn't get out of LAX until 10:20am and landed at 9:55pm. So we lost a day!

On Thursday we headed over to W1AW and took a tour kind of, chatted with people most of the time, but it was interesting. Then we left and went for a small

trip down to a seaport called Mystic (by the way if you saw the movie Mystic, they shot a scene at the Mystic Pizzeria). Here is a fun photo that caught our attention while the draw bridge behind was up while they did survey work on it. We also captured a picture of the tour boat that was coming down the river to the bay at the same draw bridge. This particular town is over 350 years old and at one time was very big as a whaling community.

On Friday, we met with all the other Section Managers that were invited to join the workshop, a couple of the section managers were detained due to IVAN - Greg from Alabama came in late Friday night due to cancelled flights. (By the way, I told the guys that I would bow out and go shopping and they said no way - stay) Became part of the group and had a great time. We started the tour of the ARRL HQ by visiting each of the ARRL officials that were in that day. We must have met about 10 officials of the ARRL. We got to go in and see the QSL Incoming/Outgoing bureau. Chuck 3BOG showed us a set of HeathKit radio station that was donated by family of an SK. Then we went over to W1AW - I know you that anyone who has been there will say "Yeh, been there done that", but it was neat to seat down at the station and start working and remembering not to use your call but W1AW and to top it we had to / 90 (90 years of ARRL). Carl & I both worked 17m a first for both of us. Carl worked W6SR, yes, Rick Samoan was trying out a new rig and just happened across Carl. He also worked an English fellow who was a pedestrian mobile operator and came in 5/8 not bad. I worked France and of course Texas and a few others. Next day was an all day event for the Section Managers in their workshop and I got to seat in, at 4pm we went back over to W1AW and worked

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Next General Meeting

The SCDXC meets the second Thursday of the month. Our next meeting will be held October 14, 2004 at Syd Kronenthal Park in Culver City. The park is located 4 blocks west of La Cienega Blvd. and 2 blocks south of Washington Blvd. From the 10 Freeway exit La Cienega south to Washington Blvd. Turn right (west) 4 blocks to McManus Ave (it's La Cienega Ave to the right, McManus to the left). Turn left (south) 2 blocks to the Park. The street dead-ends at the parking lot.

Please do not park in the school lot.

Harvey Laidman, W8DX will present his video "Legends of DX", Tall Tales and Big Antennas. produced for the Southern California DX Club. The club realized that they were losing many of their legendary members. These are interviews with W6HX, W6EA and K6OJ.

See ya there!

de the Veeceep

Jim N6DHz



As I sit here on a Friday afternoon I have just finished logging the WAE contacts I made on 40m from K6YUI's place. The weekend netted me 10 new ones on 40m. This makes the 40m DXCC a real possibility by the end of the winter. Having 3 elements on 40m sure helps. Thanks Larry!

Have you seen the DXpeditions that are coming this winter? How about 3Y0P, KH6K, FT/X, VK9L, VK9X, VK9C, FK/C, FW among others. This should be a good winter for 40m/80m so start loading those towers or hanging dipoles before it gets cold.

I was just reading a note that was enclosed with a special event station's QSL card. It is basically an advertisement for the person's web site that promotes home-based businesses. The note talks about the world post 9-11 and states "we had heard all the stories about outsourcing our job market, but now realized the dangers—to our lifestyles, our families, and our country's future". Now the note does not specifically mention outsourcing to other countries of jobs, but the implication is there. Outsourcing from one company to another company within the United States would not have an affect on "our country's future". Now the real interesting thing I found was not contained in the note but instead on the QSL card. The card, which is a nice picture QSL with an autograph of the "celebrity" on it, was printed by qslshop.com which is located in Berlin

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Bubba's Spot



Hurricane...smurricane! I am glad to live in Southern California! I have never been in one and do not need the experience. My heart goes out to all the people that were affected by the storms. I just cannot forget all the poundage at the "Anchors Away" auction at our August meeting. How many Floridians could have used some of the anchors?

I think every single item that was brought in was sold at auction, thanks to Skip, KJ6Y. He did a super job for both sellers and buyers. I am sure everyone who bought will enjoy the new treasures and the sellers are still smiling. Wayne, W6IRD, was glad Sharon, K6IRD, did not have a bidders number, but Oh Oh! She borrowed a number and was bidding away. Wayne covered his eyes, only to open them after she was outbid. Whew! Close one for Wayne.

My observation...Radio Dan wore out his number. That number spent most of the evening in the air. I did not see how he got all his treasures home. At the end of the auction I saw everyone smiling, even Julio, AD6DK and he can't see a thing! Me? I did not buy one thing! Bubba came home empty handed and happy.

Bob, N6OX, opted to take his wife to dinner for her birthday instead of the auction, (smart man), so he dropped off about 400lbs of "stuff" at his friend Bubbas. Bubba took it to auction for him and lucky it all sold and kept the local trashcans empty. Bob donated all proceeds to the club, thanks Bob.

Speaking of Bob, N6OX, he is working toward Peter 1. I have the honor of helping him ship generators from the West Coast. Seems that there are no generators for sale east of Arizona, something to do with storms on the East Coast. Boy! I'm not going and I'm excited.

OK for now, good DX to all and I'll see ya'll at the October meeting.

De Bob, W6ZPL

Propagation October 2004

by Shel, W6EL



These predictions for the five prime HF bands show the times when propagation is expected to be best from Los Angeles to several locations that are expected to be active during the coming month.

Other times are possible, but with weaker signals or lower probability. Openings are not expected on bands that are

not listed. A solar flux of **95**, corresponding to a sunspot number of **40**, and an average geomagnetic field are assumed. Sunrise/sunset times are at the DX location. All times are UTC.

Good luck and good DX from Shel, W6EL.

HK0 San Andres - 10/11 to 10/13 -
Beam 114 degrees
Sunrise/sunset (on 10/12) 1120/2306
80: 0300-1100.
40: 0100-1200.
20: 1400-0200.
15: 1600-2330.

T30 W. Kiribati - 10/9 to 10/18 -
Beam 258 degrees
Sunrise/sunset (on 10/14) 1814/0614
80: 0730-0800.
40: 0600-1430.
20: 0330-0500.
15: 1830-0230.
10: 1930-2400.

TX (?) Chesterfield Is. - 10/15 to 10/17 -
Beam 250 degrees
Sunrise/sunset (on 10/16) 1859/0726
80: 0830-1330.
40: 0730-1400.
20: Around 0430.
15: 1930-0300.
10: 2200-2400.

XU Cambodia - 10/15 to 11/7 -
Beam 310 degrees
Sunrise/sunset (on 10/25) 2255/1034
80: 1300-1330.
40: 1100-1430.
20: 1600-1630.
15: 2300-0100.

C5 The Gambia - 10/20 to 11/7 -
Beam 72 degrees
Sunrise/sunset (on 10/29) 0701/1835
80: 0330-0630.
40: 0130-0700.
20: 2300-0130.
15: 1530-2300.

S7 Seychelles - 10/26 to 11/6 -
Beam 12 degrees
Sunrise/sunset (on 11/1) 0157/1407
20: 1500-1600 and 2300-2330. Long path 1400-1500.
15: 1700-2230.

A5 Bhutan - 10/24 to 11/11 -
Beam 333 degrees
Sunrise/sunset (on 11/2) 0015/1112
40: 1130-1430.
20: 0000-0200. Long path 0030-0100.

FR Reunion - 10/23 to 11/15 -
Beam 24 degrees
Sunrise/sunset (on 11/4) 0137/1426
40: Around 0100.
20: 2000-2400 and 1500-1730. Long path 1430-1600.
15: 1700-2000.

Club Elections? Ya Got t'be kiddin!

It is true. In just a few short weeks the SCDXC will be electing officers for the year 2005. If you would like to serve the club as a director or officer now is a good time to make your desires known. Send an email to Cathy and Jim and let them know of your desires.

The board of the SCDXC determines the course of the club and your voice will be heard. Consider the few hours a year you will give to the office as a class A investment. Email now!

IOTA ACTIVITY by Fred N6AWD



Interest in IOTA activity has grown worldwide and daily there are a lot of island operations, which attract a lot of attention from island chasers. To stay informed as what is currently coming on the air one only needs to check the IOTW web page who publishes a calendar of coming operations [url is

www.islandchaser.com]. A comprehensive directory is also available from the RSGB detailing the entire program. A copy can be obtained from AD5A for \$20.

The month of October will bring on the air one of the most rare island groups in the Pacific [OC-155] namely Palup island in Micronesia, call sign V6O by Lanny W5BOS. This one has not been on the air in over 10 years and has a lot of island chasers waiting for it.

The RSGB administers the program and employs rather strict rules regarding the validation of island activities as well as what is required for QSL confirmations. The number of island group are capped at 1200 and a number of island chasers have reached the 1000 mark but it took over 30 years to reach that plateau. The program was started in the sixties and has grown tremendously in the last 10 years.

For more detailed information concerning IOTA there are several web sites which are available, namely : RSGB www.rsgbiota.org/index.php4?countthis=1

IOTA program manager's page www.g3kma.dsl.pipex.com/index.shtml . I would be most happy to answer any inquires concerning the program, my email address is n6awd@ncinternet.net

Fred N6AWD

NCDXF Elects Officers

At its Board of Directors meeting on September 11, 2004 in Cort Madera, CA, the Northern California DX Foundation re-elected the following officers and directors:

President	Len Gerdali	K6ANP
Vice President	Al Burnham	K6RIM
Secretary	Tom McShane	NW6P
Treasurer	Bruce Butler	W6OSP
Director	Rusty Epps	W6OAT
Director	Dave Pugatch	KI6WF
Director	Chuck Ternes	N6OJ
Director	Glenn Vinson	W6OTC
Director	Steve Merchant	K6AW
Director	Ken Anderson	K6TA
Director	Tim Totten	N4GN

Information pertaining to the Northern California DX Foundation is available at <http://www.ncdxf.org>

Northern California DX Foundation
by: Al Burnham, K6RIM, VP

Help Needed

The SCDXC newsletter needs input from you. There is NO COST to be a published author. All you need do is type a story—tell us about the best QSL, the hardest contact you made, the new rig or a remembrance. The newsletter editor will be glad to publish your efforts. We pay the highest price for published articles.

And, to answer a recent question—we will, upon request, publish without revealing your real name.

**ARRL elections are important.
Send in your ballot now!**

**happy birthday to all some
members celebrating birthdays in
the month of october.**

**The Fall season is upon us. Look for long
path in the AM and get ready for the major
DX contests at the end of the month.**

Soap Box — de la Presidente de el Veeeeep

(Continued from page 2)

some more. Since Carl and I and a few others worked the day before I logged for two of the hams shown in this picture. Kent is in the Air National Guard and flew his F-16 to CT (wow). Kevin became a ham when a serious Hurricane hit Hawaii and saw how Hams helped in communication when all else failed. Sunday same workshop and then played radio (some), we went to a BBQ on the north side of Hartford.

Monday we toured an old village in Sturbridge, MA got there at 9am and didn't leave until 5:30pm. Homes dated back to the 17th century and the story of people who lived in the communities. We did want to go to Boston/Salem, but we were so intrigued with this community and the serene surroundings. We goofed off on Tuesday and then home on Wednesday. The weather was in the high 70's and humidity was high, but livable.

Hurricane Ivan brought rain and wind on Saturday, but in our area nothing threatening. Beautiful skies Saturday - through take off on Wednesday the 22nd. Green Green Trees, beautiful homes and great food.

Carl & I are back to work and also working with the kids at the Home Depot Kid's Day taking place on October 2nd, which is also SET (Simulated Emergency Test) Hope that you will all be participating with your clubs. Very important to involve the community in this test. Don't forget that JOTA takes place on October 15 -16. Gather up the Scouts and work other JOTA stations.

See you all at club
73 & 88
Cathy K6VC

AN INVITATION

You are invited to send articles and photos to the editor of the SCDXC Newsletter for publication.

We thank the contributors this month and hope to be able to thank YOU as well in coming months. K6LD send us the photos of our last meeting, N6AWD and AG6X sent articles of interest.

TREASURES COMMENTS

It is OK to send in dues for 2005. Still the bargain price of \$18.

(Continued from page 3)

Germany. I'm sure that when this small home-based business owner reads in the news about a multi-billion dollar corporations outsourcing to another country they are outraged. But when it comes to their own dollars and saving some money they leave skid marks on W4MPY's (www.qslman.com) scalp as they skip over him on their way to DL land to get their QSL's printed. I have no affiliation with W4MPY other than being a customer, you could put any other US based printers name in his place, Wayne was just happened to be who came to mind as I wrote this.

I want to take a few lines and thank all of you who came out to the auction and especially those of you who were nice enough to donate items to the club. We made enough money on the auction to cover almost all the raffle prizes for the next meeting. Speaking of the next meeting it will be a really great, fantastic and super program. "What is it?" you ask. I have no idea I'm heading out for a week of fishing in the eastern Sierras and have not had any time to get something put together yet. Do you guys like pictures of fishing? I'm sure I will get an inspiration while I'm standing in the cold at 8000ft pulling in a nice trout.

I'm glad we got an opportunity to hear from Don, N6IC (speaking on behalf of Dick, N6AA) and Tuck, NZ6T on the upcoming ARRL election. By the time you read this the ballots will be in the mail. Be sure the check www.scdxc.org for the flyers on both candidates, vote and mail your ballot in.

I'm still looking for a couple of people to serve on the board for next year so if you interested please e-mail me (n6dhz@scdxc.org) or talk to me at a meeting. Speaking of e-mail if you would like a scdxc.org e-mail address let the webmaster know and he will fix you up with one.

Remember it's never too early to get your reservations in for the Holiday Party. Don't forget we will be in a private Room this year. Details can be found on the web site.

See you at the meeting (I will be the one with the fish).

73 DE Jim, N6DHZ

Annual "Boat Anchor" Auction



Lots of STUFF

Lots of bidding

Lots of FUN!

The 80 meter Triangular Vertical Array at AG6X

Having moved to California from Chicago in 1999, I was enjoying many things about Southern California but not much in the way of Amateur radio. My 9-land call had expired but after moving into a new home I caught the bug and planned to assemble the station I had always wanted when I was a novice back in 1977. Back then; I would look over the CQ magazines in the rack at the local grocery store where I worked. The new Kenwood TS 820 and TS520 were out and the hot ticket was a KLM beam and an Alpha amplifier...what a dream to have a station like that I thought.

Fast forward to 2002 where I found myself studying for the tech license all over again. Wow...a few things have changed...where did the 20 wpm code requirement go? I was re-licensed as KG6OMF and then received the vanity call AG6X. I assembled my dream station with a little help from Rich, W6VX and Skip, KJ6Y who helped out with the antennas and tower.

With a booming signal on 10,15 and 20 I began listening on other bands too. Early on, I had never been interested in 40 or 80 meters and lacked the interest to put up a dipole to get on these frequencies. But one morning as I was listening to the 75 meter DX window I heard Dale Hoppe, K6UA, Otto, W5YU and others working long path signals into Europe with huge antennas, not the least of which was Otto's monster 3 element yagi or his Rhombic at 100 feet. This was something I had to try.

I purchase a Butternut HF2V vertical and placed about 16 various length ground-mounted radials under the antenna. I was able to hear a lot better but didn't stand a chance at the OH and SM stations that I heard coming in over the long path. I purchased another Butternut HF2V and aligned them toward JA and South America resulting in great signal reports from Japan, Korea and South America. With visions of DX dancing in my head, I decided to buy another HF2V and a triangular phasing box that would allow me to switch the array in three different directions. The antennas were configured so I was directing my signal at VK in the westerly direction, Europe in the northeasterly direction and South American in the southeast direction. An Array Solutions phasing box was placed on the side of a small shed along with the $\frac{1}{4}$ wavelength phasing lines all of which are located in the middle of the array. This array worked well but the Butternut antennas were definitely handicapped measuring only 32 feet tall...this was only $\frac{1}{8}$ wavelength high on 80 meters. The Butternut antennas also had a bad habit of blowing the HV doorknob caps across the yard when RF was applied via an 8877. With these problems facing me I decided to go large. I ripped up the Butternut verticals and sold them to a guy in Texas who was going to mount them to a steel barn roof. He was worried about the chickens that roosted there and their susceptibility to RF...I couldn't give him any advice on that one.

My friend Dale Hoppe, K6UA, came through supplying me with nice 14" aluminum tower that started life as 5-element 40 meter yagi. I had enough tower to assemble three 32' vertical towers that would then accept 35' aluminum stingers for a total height of 67'. The bases of the tower are 14" and then taper to 10.5" at the 8' level, this makes for a nice solid base. I was able to place a 4' section of tower into the ground within a cube of concrete that allows the base legs to protrude from the concrete about 8 to 10". With this done, I had to come up with a plan to insulate the base of the tower from ground so the tower could be series fed. The prices for tower leg insulators range from \$180 for a set of three to \$1150 for a set of three (times three towers...yikes) I decided I had to find something more economical.

I put the call out on the tower talk reflector and received some great ideas. One was from a ham that was using schedule 40 PVC pipe for his tower leg insulators. He explained that he used Rohn 25 steel tower with elevated radials and

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insulated the base section from the radiating section of the tower with a double thickness of schedule 40 PVC. With this in mind I traveled to the local Home Depot to find a section of schedule 40 that just fit over the leg of my tower. I then found the next larger size of PVC and it fit over the second section with just enough room for a good thick layer of PVC cement. I decided that I wanted my insulators a little beefier so I sourced a third piece of PVC that fit over the second one resulting in a triple thick PVC insulator that cost me about \$1.00 each...this sure beat the \$540 price I was ready to pay for the simple fiberglass units.

I placed the insulators over the legs of the stubs that were sticking out of the concrete. The bases were now ready to accept the towers that were still being assembled.

With 4 sections of aluminum tower bolted together I laid out sections of 6061 aluminum tubing and bolted them together using conductive paste and RF braid jumpers between the sections. The 2 ½" aluminum tubing connects to the tower via 4" bolts and tapers to approximately 5/8" at the top. All three antennas are constructed identically.

With the first vertical assembled and lying on the ground I invited two of my buddies over for the raising of the first big tower vertical. I provided the muscle for walking the 100 lb tower up into place while my buddies held the base of the tower steady and prepared to slide the tower into the base insulator holes. While this sounded great in theory, my buddies couldn't provide the necessary torque required to keep the base end of the tower under control. Too much easy living in Orange County!

With this attempt now filed under "learning experience #786", I proceeded to source some laborers that would allow me to throw sheer numbers at the problem. Four guys showed up on Saturday morning and proceeded to look at the tower and then look at me and mumbled something about "loco gringo". With four Guatemalan midgets holding the base of the tower in place I walked the tower up and watched it slide elegantly into the legs of my custom engineered base insulators all the while yelling "Suave, Suave" to the guys holding the base. We quickly placed the mounting bolts through the insulators holding the antenna firmly in place with one of the workers exclaiming "Bonita"...I had to agree!

I installed two guy lines about two thirds of the way up the antenna to help eliminate some of the whip that would come with the Santa Ana winds. Otherwise the antenna is self-supporting and looks great.

With the mechanics done, I fashioned a feed point connector to see where the antennas resonated. The MFJ dipped at 3750khz and indicated the base impedance was right on the money at 36 ohms at 1.5 vswr. A Jerry Sevick, W2FMI, designed Unun was used to match the 36 ohm base impedance to the 50 ohm transmission line. Approximately 60 radials varying in length from 15' to 100' were used along with a couple radials terminating to my neighbors 400' chain link fence.

This first antenna worked very well by itself with 59+30 signals reported into JA, DS, DU and LU. Dare I add the other two antennas?

The next weekend my Guatemalan buddies were back to erect the second antenna. This installation went as planned and the laborers were gone in 15 minutes. This second antenna was configured as the southeast antenna that allowed me to phase two antennas into Japan and South America. This two-antenna design really impressed me with the signal reports that I was receiving from Asia, Russia and South America. Switching from North to South rewarded me with 20db of front to back ratio.

The third and final antenna went up the next weekend and shared the same characteristics as the first two. By now my neighbors were deciding which antenna they were going to hang me from. One neighbor even came over to ask, "why do you need so many antennas?" After explaining that all three towers comprised one antenna he left with a look that indicated that he didn't quite understand the whole thing.



The heart of the array is an Array Solutions triangular Array Controller. (see photo) The controller simply inserts the 90-degree delay line into the antenna circuit you want to lag the current or, more specifically, determines the direction you wish. You can find this and their other array controllers at www.arraysolutions.com. The controller consists of an aluminum enclosure with an input coaxial feed, three outputs for the antenna feeds, two inputs for the phasing delay line and an

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input for the control cable that selects what antennas lead and lag in current. While the box works well now, it didn't when I first received it. The controller coax connectors were supplied with insulating goop on them and were riveted to the enclosure resulting in strange VSWR readings when switching the array in different directions. The controller went back to the factory and returned with no problems found. When I got it back the second time I tore it apart myself and cleaned the connections of the silicon sealant and re installed all of the RF connectors using star washers. After this the unit worked as advertised.

I have been using the array now for the last few months with excellent results. However, with the antennas switching in three directions I do find that I am not effectively reaching certain areas of the globe. Specifically, I am weak into JA, Southern Africa and long path into Europe. I have decided to add some more flexibility to the system by adding additional switching that will allow me to switch out any one of the antennas while switching in a dummy load. With this technique I'll retain my original 3 directions (NE, SE and W) using three antennas while being able to switch any two antennas in six directions for a total of 9 directions...we'll see how this works.

60 radials attached to a 30" x 30" copper base plate (see picture) are now under each antenna and I am in the process of installing three $\frac{3}{4}$ wavelength feed lines to each antenna to aid in routing the cable. The results I have achieved are quite surprising as I am receiving signal reports that are on par with the 4 squares and even the 3 element yagis that prowl the DX window. This DX season should be a fun one and I am looking forward to hearing signal comparisons on the band.

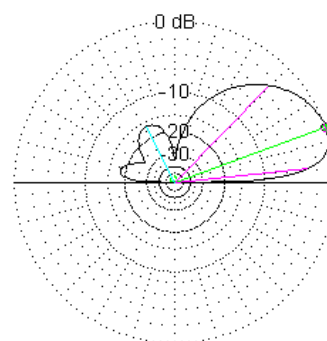
Contact me with any questions you have on this array or the shortened Butternut array that preceded this one. Shortened verticals have shown to provide similar radiation patterns to the full size arrays and when properly top loaded can compete with just about anything on the band.

General Specs:

- Antenna Height – 67'
- Element Spacing - .29 wl
- Antenna Material – Aluminum tower with 6061 tubing for the stingers
- Bandwidth – 300khz (2:1)
- Switchable in 9 directions via an Array Solutions Switch box
- Estimated Forward Gain 6 dbd
- Estimated F/B 20db (more accurately Front to Side)



Total
H pol
V pol



EZNEC

3.8 MHz

Elevation Plot
Azimuth Angle 0.0 deg.
Outer Ring 7.62dBi

Cursor Elev 20.0 deg.
Gain 7.62 dBi
0.0 dBmax

Slice Max Gain 7.62 dBi @ Elev Angle = 20.0 deg.
Beamwidth 40.0 deg.; -3dB @ 5.6, 45.6 deg.
Sidelobe Gain -8.58 dBi @ Elev Angle = 117.0 deg.
Front/Sidelobe 16.19 dB

Who We Are

The SCDXC Newsletter is published monthly by the Southern California DX Club and is e-mailed to all club members.

Please notify the editor if you do not receive your newsletter, have a change of address, or have found an error.

Please direct all submissions to the editor.

The SCDXC generally permits re-use of any article in the Newsletter as long as the newsletter and the article's author are credited. However, some articles may be copyrighted by the author. Please contact the editor.

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For Sale:

Yaesu FT-890. This radio is owned by Vlad, AC4LN/UA4WHX and was used by him during his 2003 Pacific DXpedition. I have not had it on the air but Vlad said it does work but has some problems. I had it in to Yaesu for but the estimate for the labor cost was so high that it was not feasible to have them fix it. I'm sure one of you reasonably competent technical types could fix it without much trouble. I can give you the list of problems that was given to Yaesu. Cosmetically the radio is in very good shape, a few minor scratches only. I'm trying to sell it for as much as we can get so Vlad can get a similar radio for his next DXpedition. I will entertain all reasonable offers. If your interested and want more info Please e-mail Jim, N6DHZ at n6dhz@scdxc.org.



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